

~~SECRET~~

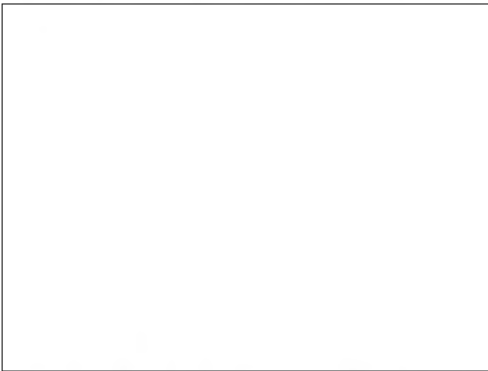
CONFIDENTIAL

13 September 1955

MEMORANDUM FOR THE RECORD

SUBJECT: Table Showing Status of Hole-Drilling Projects as of 7 September 1955

1. The Third Monthly Meeting of the Hole-Drilling Committee was held on 7 September 1955. Those present were:



25X1

2. The table below shows the status of the project at the present time.

AFB Division



25X1


Subject:

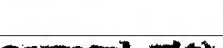


Status:

Remarks:

25X1

Masonry Drilling. Proposal was all-inclusive and not specific.

 will submit another proposal.

 discussed proposal with  of  in greater detail as to the need of the project.

25X1

25X1

25X1

National Bureau of Standards

Wall-thickness Measurement Group. Possibility of ultrasonic measurement and type of equipment which might be used.

Proposal accepted and work now in progress. Final results expected in 3-4 months.

Chemical Division



Chemical decomposition of concrete and mortar

awaiting security approval. This company has contract research work on cement and concrete chemistry.

B/1005

~~SECRET~~

008632

DOC	13	REV DATE	22 July 80	BY	057447
ORIG COMP	056	OPI	56	TYPE	03
ORIG CLASS	5	PAGES	9	REV CLASS	
JUST	22	NEXT REV	2010	AUTH	HR 70-2

25X1

~~SECRET~~Chemical Division (Contd)~~CONFIDENTIAL~~

25X1

SubjectStatusRemarks

Chemical decomposition of concrete and mortar.

Awaiting security approval.

These companies do contract research work on cement and concrete chemistry.

25X1

Wall-thickness measurement

Feasibility study and calculations now underway.

Use back-scattering of neutrons.

Engineering Division

25X1

Proposal covers:

Proposal will be dropped.

There are several other methods of obtaining alternating current as well as manual methods of obtaining power. (See Proposal.)

- Survey of batteries to be used to run motors.
- Survey of d.c. motors to determine feasibility of battery-operated, quiet, drills.
- Preliminary masonry drilling tests with available equipment.
- Report of results and conclusions - \$6360 - 4 mos.

25X1

Proposal covers a general study of the present state of the art and consideration of new methods of wall penetration. Suggests work on:

Proposal will be re-submitted. Emphasis will be upon mechanism of cutting, such as angle of cutting bit; also high velocity jets.

- Ultrasonic drilling.
- Jet of abrasive particle in liquid or air.
- Rubber bit impregnated with diamonds - \$9734 - 6 mos.

25X1

- 2 -

~~SECRET~~

Engineering Division (Contd)

(Contd)

25X1

Subject	Status	Remarks
---------	--------	---------

Proposal covers a first phase
for:

- Survey of commercial equipment.
- Tests of borrowed commercial equipment to determine what could be used and what should be developed for our purposes.
- Reports of results and recommendations - \$4500 - 4 m.s.

Will accept as is.
Proposal being processed.

25X1

The proposal covers the construction of a testing facility to consist of a building (10' x 20') with heat and power. Test walls would be constructed inside in order to simulate drilling in a room. Sound level measuring equipment and 20 weeks of testing are included - \$17,000 - 1 year.

Testing has been arranged whereby ED will brief in detail as to requirements.

25X1

25X1

Pipe Pusher Program

It has been decided to accept this proposal as it stands. It has the informal approval of ASD. Present program is being expanded.

The new program will include testing of drilled determination of the horsepower and load requirements for penetrating various materials. [] has already determined that by using a hollow 5/16" hollow air-cooled drill they can penetrate 30' of concrete in 2 minutes. Rogers Company can furnish details on this test.

25X1

Silent alternating current drives and manual drives.

Holding proposal for additional personnel clearance before submitting it to us.

~~SECRET~~

~~SECRET~~

CONFIDENTIAL

Engineering Division (Contd)

[Redacted]

25X1

<u>Subject</u>	<u>Status</u>	<u>Remarks</u>
General Proposal	Proposal has been mailed to us.	

[Redacted]

25X1

Explosive projectile such as used by carpenters to nail lumber to concrete.	Still awaiting proposal.
---	--------------------------

[Redacted]

25X1

General proposal.	Nothing new to report.
-------------------	------------------------

T&L Division

Softening of concrete.	Feasibility tests and studies.	T&L will test theory that concrete can be softened by subjecting it to sudden extremes of temperature.
------------------------	--------------------------------	--

[Redacted]

25X1

T&L/Chemical Division

~~SECRET~~

CONFIDENTIAL